What Contributes to Customer Satisfaction and Loyalty in Virtual Academic Conferences?

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Abstract: Due to COVID-19, many academic conferences were canceled or virtually held during the pandemic in 2020 and even after 2020. This study contributes to the existing studies on customer satisfaction, electronic word of mouth, and loyalty in virtual academic conferences. There were 155 respondents who were surveyed to find out if the quality of speakers, number of conferences attended, time since previous visit, and organizer's reputation affected their conference satisfaction and intention to attend the next conference. This study shows the significant influence of the quality of speakers and organizer's reputation on customer satisfaction. Further, this satisfaction led to positive electronic word of mouth and customer loyalty. In this study, loyalty was measured as the participants' intention to join the conference again.

Key Words: Virtual Academic Conferences; Customer Satisfaction; Positive Word of Mouth; Loyalty

1. INTRODUCTION

Due to COVID-19, many face-to-face academic conferences were canceled in 2020 and onwards in many countries (Fang & Daniel, 2021). To contain COVID-19, there were conference organizers who implemented virtual academic conferences. Compared to large corporate events, academic conferences are smaller, more specific, and shorter in duration (Godovykh & Hahm, 2020). Virtual academic conferences (VACs) are events where conference organizers try to satisfy the conference participants so that they will continuously attend the conference. Some organizers feature crowd-drawing plenary speakers, introduce networking activities, and invite editors of journals to boost attendance at academic conferences (Godovykh & Hahm, 2020). There are studies on what encourages or discourages participants from attending conferences. Most of these studies do not focus on virtual academic conferences. Thus, this research attempts to contribute to the existing studies in this field.

1.1 Customer Satisfaction

Customer satisfaction plays an important role in the success of organizing the VACs. As posited by Ali et al. (2021), it measures the level of expectation between the company's product/service and customer expectations.

Based on studies on academic conferences (Falk & Hagsten, 2021; Godovykh & Hahm, 2020), the factors that influenced customer satisfaction and loyalty were the quality of speakers, number of conferences attended, time since previous visit and organizer's reputation.

There are competing theories that explain customer satisfaction that boosts repeat customers or loyalty and profitability. The Value Percept Theory explains customer satisfaction based on the customer's perceived actual value of a product or service, and ideal value of quality or performance as expected

before purchase (Gipson, 2019). On the other hand, Equity theory holds that customer satisfaction can be achieved when customers see or experience consistency between what was expected and experienced. Consistency in both expectations and experience is the key to good customer experience.

The most promising theory for assessing customer satisfaction was noted by Oliver (1977) who proposed the Expectancy-Disconfirmation Paradigm or EDP. This framework suggests that consumers purchase goods and services with prior expectations on the anticipated level of performance of a good or service which then becomes the standard of outcomes that are compared against expectations. Hence, confirmation or disconfirmation may occur if there are differences in the expectations and outcomes. This further implies that a customer is either satisfied or dissatisfied as a result of positive or negative difference between expectations and perceptions (as cited in Yüksel & Yüksel, 2008).

1.2 Loyalty in Virtual Academic Conferences

Customer loyalty has been defined by Oliver (1999) as the commitment of customers to consistently repurchase a company's product or service in the future. Studies show that 99% of unhappy customers will never purchase the same product or service again. In the VAC context, organizers of the conference focus on their customer satisfaction by providing service quality to increase their profitability (Ali et al, 2021). The study of Gipson (2019) argues that higher levels of customer satisfaction bring greater loyalty among customers.

The intention to attend a virtual conference again can be referred to as customer loyalty as defined by Kotler et al. (2022). Excellent speakers at the start of the conference or at the end of the conference positively influenced the participants' satisfaction. The quality of the speakers' lectures were measured by its applicability, appropriateness, content and topic coverage. Interestingly, those who have previously visited more than one conference tend to have higher satisfaction (Godovykh & Hahm, 2020). Positive perceptions of conference organizers influenced the

participants' satisfaction (Falk & Hagsten, 2021). The participants' satisfaction led to intention to join the next conference and positive word of mouth (Falk & Hagsten, 2021; Godovykh & Hahm, 2020).

1.3 The Research Problem and Objectives

The inextricable link between variables, consumer loyalty, and satisfaction seems to lack symmetry. Albeit loyal consumers are satisfied, it does not automatically translate into loyalty (Oliver, 1999). Thus, it is significant and timely to address the significant research question: What contributes to the satisfaction and loyalty in virtual academic conferences?

This study aims to determine the factors influencing the respondents' satisfaction and loyalty when they attend virtual academic conferences. Specific objectives address the following research questions: 1. What factors affect the conference participants' satisfaction and loyalty when attending virtual academic conferences? 2. What will encourage virtual academic conference participants to attend the virtual academic conference again? 3. Do academic conference participants consider the organizer's reputation before joining a virtual academic conference? 4. Do the quality of speakers' talks affect the conference participants' satisfaction and loyalty?

Most of the conferences were conducted in virtual mode due to the travel and social gathering restrictions caused by the global pandemic. Therefore, this study is anchored on the work of Godovykh and Hahm (2020), which highlights the following elements of a virtual conference such as quality of speakers, the number of conferences attended, the time since the previous visit, and the organizer's reputation to have contributed to customer satisfaction and intention to join the VAC again or loyalty. All of these critical elements drive the motivational behavior of the customer stakeholders based on their peak experience in the virtual conference attended.

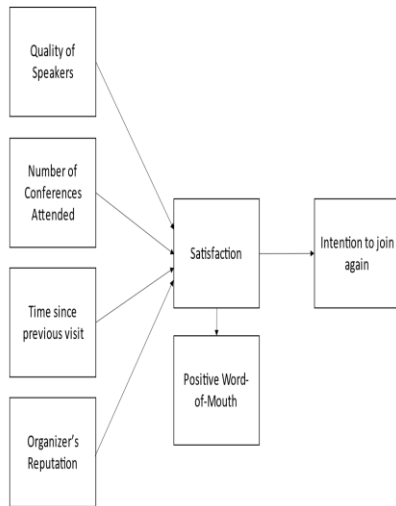Figure 1 shows the study's framework:

Fig. 1. Factors Contributing to Customer Satisfaction and Loyalty in Academic Conferences (adapted from Godovykh & Hahm, 2020)

Customer satisfaction and loyalty are issues of significant interest for businesses that offer products and services (Kotler & Keller, 2016). Consequently, the benefits such as professional development opportunities and social interaction that VAC participants could gain from attending a virtual conferencing mode (Porwol et al., 2022) contribute to customer satisfaction. In the context of VAC, these factors are also crucial in the organization of VACs, emphasizing the speaker's quality of performance and attendees' experience that meets or exceeds expectations. Hence, high satisfaction or delight based on the experience of VAC participants is hypothesized to influence loyalty or increased intention to join the conference again.

2. METHODOLOGY

A self-administered survey, which was cleared with the Research Ethics Office, was used for this study. Only respondents who had experienced attending a virtual academic conference were selected. The relationships of the different sets of latent variables were analyzed using partial least squares-structural equation modeling (PLS-SEM).

Data were collected from 155 respondents who were surveyed to find out if the quality of speakers, number of conferences attended, time since previous visit, and organizer's reputation affected their conference satisfaction and intention to join the next conference. PLS-SEM is an appropriate method when there is a small population that restricts the sample size (Hair et al., 2019).

Participants of this study, who took part in the survey, were limited only to those who have attended at least one virtual academic conference. The study employs quantitative research design. There were no focus group discussions conducted due to the mobility challenges during the pandemic.

3. RESULTS AND DISCUSSION

The relationships of different sets of latent variables were analyzed using PLS-SEM.

Table 1 Correlation Matrix

	Intention	NumConf	OrgRep	PosEwom	PrevVisit	QualSpeaker	Satis
Intention	1	-0.085	0.56	0.793	-0.014	0.363	0.459
NumConf	-0.085	1	0.009	-0.119	0.075	0.007	-0.092
OrgRep	0.56	0.009	1	0.535	-0.024	0.32	0.4
PosEwom	0.793	-0.119	0.535	1	0.06	0.461	0.642
PrevVisit	-0.014	0.075	-0.024	0.06	1	0.062	0.013
QualSpeaker	0.363	0.007	0.32	0.461	0.062	1	0.471
Satis	0.459	-0.092	0.4	0.642	0.013	0.471	1

Legend: NumConf Number of conferences, Satis Satisfaction, OrgRep Organizer's Reputation, PrevVisit Previous Visit, QualSpeaker Quality of Speaker, PosEwom Positive word of electronic mouth

Table 1 shows the following variables: number of conferences (-0.085) and previous visits (-0.014) showed negative correlations in terms of intention to visit the conference again or loyalty. Whereas, all p-values < a=0.05, significant correlations exist for these variables: organization reputation (0.56), positive e-wom (0.793), and quality of speakers (0.363) indicate a positive correlation with intention.

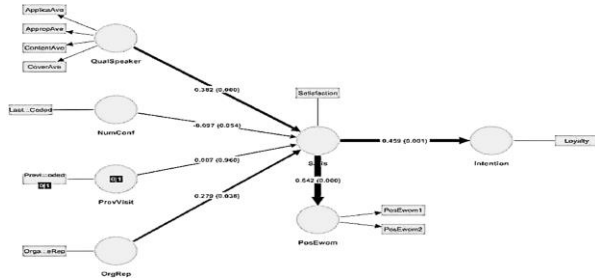Figure 2 shows the graphical representation of the PLS-SEM results.

Fig. 2. PLS-SEM Results

The structural equation model in Figure 2 shows that only an organization's reputation (path coefficients=0.279; p-value=0.038) and quality of speakers (path coefficients=0.382; p-values=0.000) have significant influences on the satisfaction of virtual academic conference participants. This leads to positive electronic word of mouth (Sivadas & Jindal, 2017; Tripathi, 2017). Overall, the hypothesized models for satisfaction, positive word of mouth, and intention to join the virtual academic conference are all technically good as indicated by p-values lower than a=.05.

Table 2 shows the organization's reputation had a significant positive relationship with satisfaction. Likewise, the quality of the speaker's lecture of the topics positively influenced satisfaction. Further, satisfaction positively influenced both intention to attend again (loyalty) and positive electronic word of mouth.

Table 2 Summary of SEM Results.

Paths	Coefficients	Sample mean (M)	Std. dev. (STDEV)	T statistics (|O/STDEV|)	P values
NumConf -> Satis	-0.097	-0.094	0.051	1.924	0.054
OrgRep -> Satis	0.279	0.304	0.134	2.081	0.038
PrevVisit -> Satis	0.007	0.016	0.133	0.050	0.960
QualSpeaker -> Satis	0.382	0.392	0.061	6.278	0.000
Satis -> Intention	0.459	0.492	0.141	3.254	0.001
Satis -> PosEwom	0.642	0.675	0.110	5.836	0.000

Legend: NumConf Number of conferences, Satis Satisfaction, OrgRep Organizer's Reputation, PrevVisit Previous Visit, QualSpeaker Quality of Speaker, PosEwom Positive word of electronic mouth

The number of conferences obtained negative path coefficients (-0.097), indicating a negative relationship with the variable satisfaction. However, it only moderately affected the satisfaction of attendees as indicated by p-values=.054, which is just slightly greater than a=.05. Albeit, this factor was negatively correlated with satisfaction, the effect did not yield significant results.

Organization reputation (p-values=.035) and quality of speakers (p-values=.000) both obtained p-values < .05, hence, these factors are found to be significant predictors of conference participants' satisfaction. This validated the studies of Godovykha & Hahm (2020) and Falk & Hagsten (2021). On the other hand, previous visits did not indicate a positive influence on satisfaction, which contradicted the findings of Godovykh & Hahm (2020).

Overall, results of this study prove that satisfaction of customers play a vital role in retaining their loyalty similar to the findings of Rao et al. (2021).

The study's results can be linked to the findings of scholars (Al-Gasawne & Al-Adamat, 2020; Rahim et al., 2016) where customers' purchase intentions happen when positive word of mouth is achieved.

4. CONCLUSIONS

The success of virtual conferences, as shown in the results of this study, starts with the lecture quality and the organizer's reputation, which positively influence satisfaction. Consequently, satisfaction leads to loyalty or intention to attend future conferences and positive word of mouth.

This study confirms the findings of previous studies (Sivadas & Jindal, 2017; Tripathi, 2017; (Godovykh & Hahm, 2020; Falk & Hagsten, 2021) that customer satisfaction leads to intention to join the conference again or loyalty which then leads to positive

electronic word of mouth. Further, this paper shows the importance of quality of speakers and the organizer's reputation as significant factors of customer satisfaction and loyalty. However, in the context of virtual academic conferences, this study did not find the number of conferences and previous visits as having a significant influence on the satisfaction of conference attendees in the virtual environment. The findings of this study have implications on the crucial role of quality management decision making that drives the success of virtual conferences and satisfying customer experiences in the virtual world. Future research must explore innovative designs as mediating factors for effective and efficient virtual meetings, conferences and events.

Given the uncertain environment in the academic settings, conferences are still expected to be conducted utilizing hybrid solutions (Medina & Shrum, 2022; Porwol et al., 2022) to satisfy conference attendees.

Managerial Implications

The VAC organizers need to build a structure on how to deliver seamless conference programs to add customer value and provide satisfaction and fulfillment to the audience. Further, contribution of this research demonstrates the practical value of applying the theoretical model in this context of virtual conference

Limitations and Areas for Future Research

Future research may provide imperative analysis on motivating, moderating, and mediating factors of virtual conference satisfaction as emphasized in the contemporary literature such as professional development opportunities and social interaction (Seidenberg et al., 2021; Porwol et al., 2022).

Declaration Statements

There are no existing conflicts among authors in the research and publication of this article.

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